



Rail Enhancement Fund
Project Application Form
FY 2010

Internal Use
20100056
DRPT Tracking #

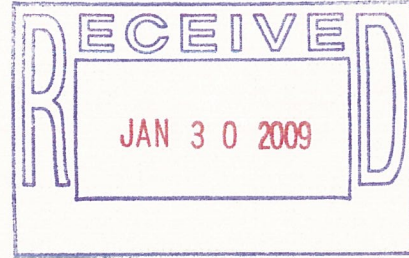
Date: January 30, 2009

A. Name of Applicant (Name and Address)

Norfolk Southern Railway Company
Three Commercial Place
Norfolk, VA 23510

Applicant type:

- ☐ Passenger Railroad
☒ Freight Railroad
☐ Locality
☐ Business
☐ Other _____



B. Contact Information:

Responsible Person/Title: Sarah Quisenberry, Director Strategic Planning

Telephone: 757-629-2686 Fax: 757-533-4884 Email: sarah.quisenberry@nscorp.com

Project Manager/Title: Sarah Quisenberry, Director Strategic Planning

Telephone: 757-629-2686 Fax: 757-533-4884 Email: sarah.quisenberry@nscorp.com

C. Project Title: Coal Corridor Initiatives - Clarkton

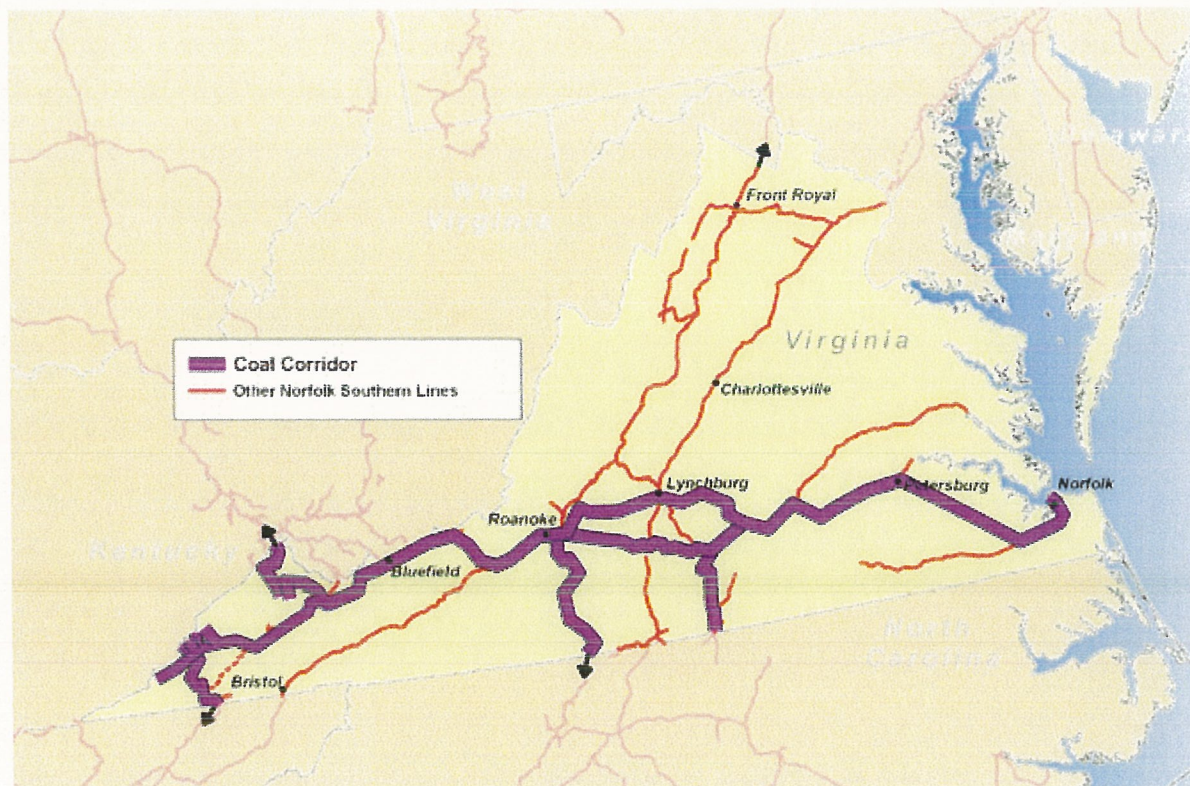
Modified
by DRPT

D. Project Location: (City/County, Rail line, Railroad Mile Post, attach map)

The Coal Corridor is comprised of the NS mainlines from the Port of Hampton Roads across the southern half of the state through Roanoke and into the Virginia coalfields. NS lines to coal fired power plants in southern Virginia and on the Virginia/North Carolina border are included as well. (see map next page)

Projects:

- ~~A) Andover Rail Sidings - Andover, Wise County, mp 2.3-T to 1.2T & LN-279.1 to LN-280.1 (see Exhibit I)~~
B) Clarkton Passing Track Extension, Clarkton, Halifax County, mp L-37 (see Exhibit II).



E. Owner of Property/Right-of-Way/Facility/Personal Property:

Norfolk Southern Railway Company owns the mainline track rights-of-way, tunnels, bridges, and related appurtenances. NS or an affiliate will acquire any property required.

F. Responsible Party for Continuous Maintenance of Project:

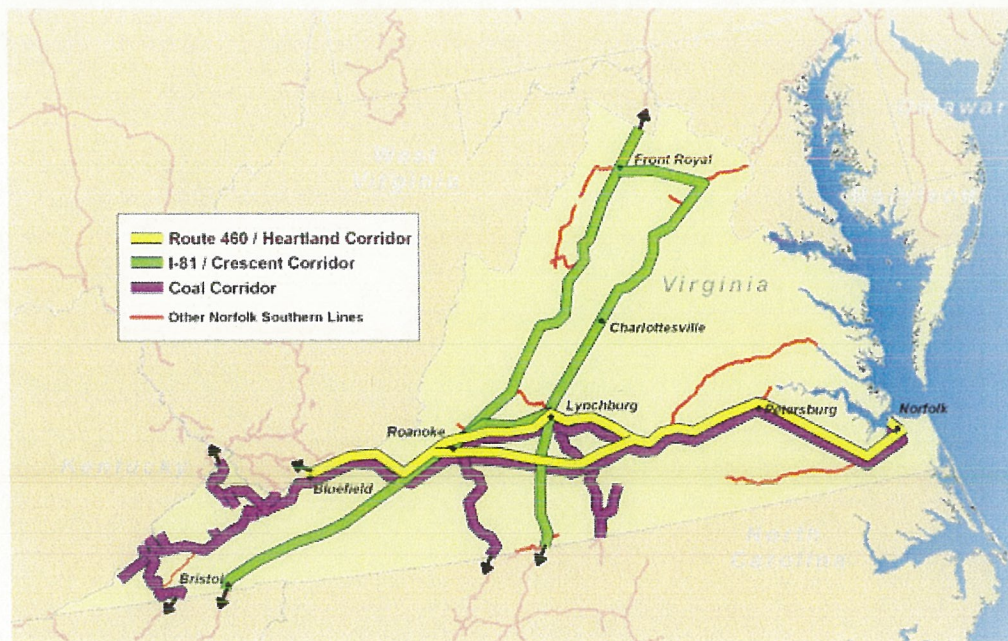
Norfolk Southern Railway Company. This application is for capital costs only. NS will assume all ongoing maintenance and operating cost responsibilities and future capital costs.

G. Project Information:

1) Description of Project:

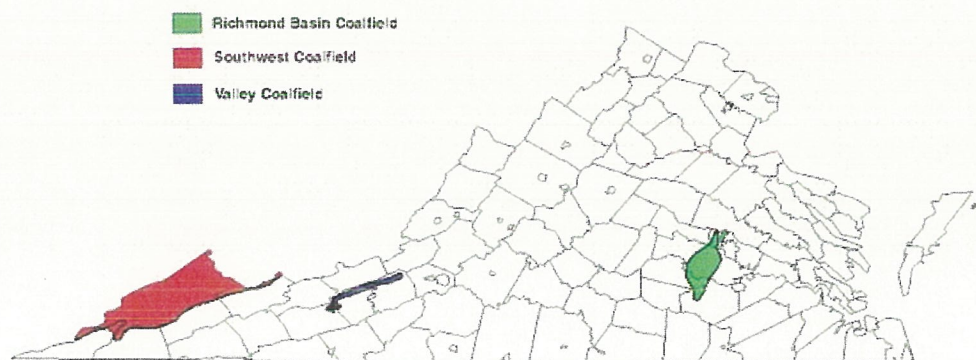
The NS Coal Corridor is comprised of the NS mainlines from the Port of Hampton Roads across the southern half of the state through Petersburg and Roanoke and on to the Central Appalachian coals fields, as well as branch lines serving the coal fields and coal-fired power plants. The Coal Corridor and Route 460/Heartland Corridor (subject of another Rail Enhancement Fund application, overlap from the Port of Hampton

Roads west to Bluefield. The I81 Crescent Corridor also overlaps the Coal Corridor from Lynchburg and Altavista west to Radford.



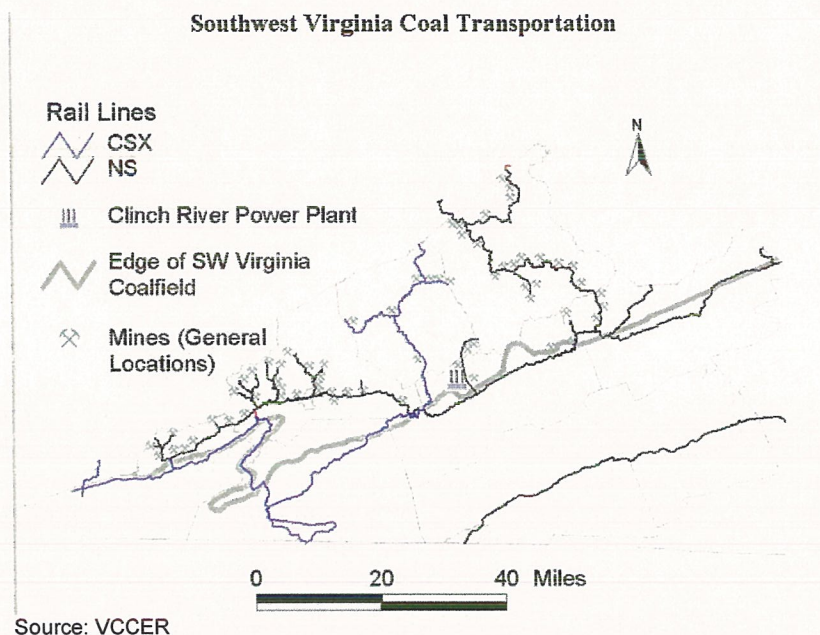
Strong freight railroads with adequate capacity enable companies in the Commonwealth of Virginia to conduct business efficiently and effectively. A strong transportation network is vital to a state's economic health and future vitality. In recent years US annual coal production has been over one billion tons, while Virginia production has been approximately 30 million tons. The growth in US coal has been driven by the Powder River Basin coal in the west. Declining Virginia coal production has had a significant impact on southwest Virginia producing some of the state's highest unemployment rates since the 1990s. Despite these challenges to the industry, the Virginia coal industry contributes significantly to the state's economy.

Coal-Field Regions

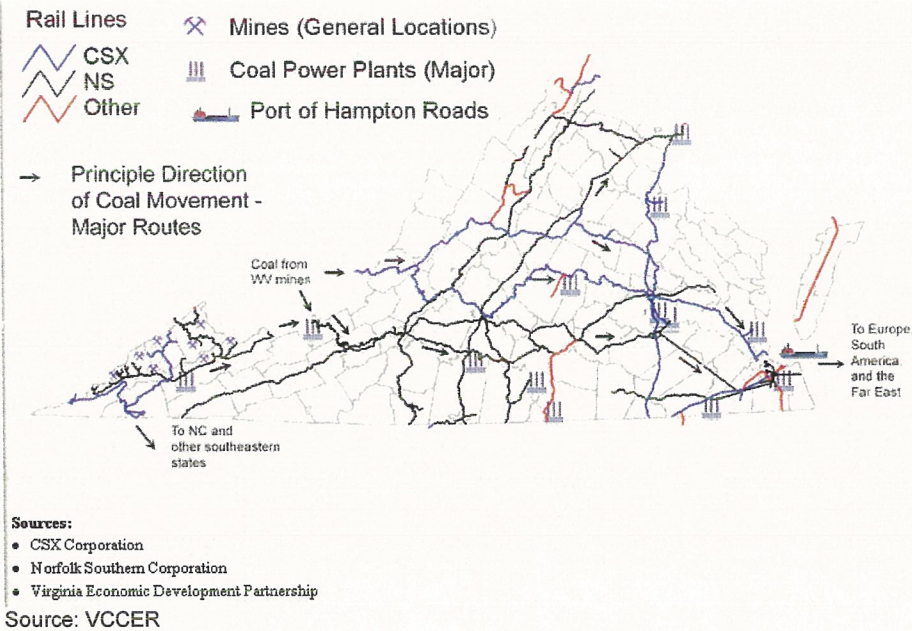


Source:
• VCCER

Recent changes in the global market, from the value of the US dollar to consumption by China of coal and steel, have resulted in enhanced opportunity for the US coal producers. Virginia coal is generally high in quality with a high energy content and low sulfur content, an ideal combination for electricity generation. Hampton Roads is the nation's largest coal port. NS coal shipments through Hampton Roads increased 41% in 2008 (vs 2007) from 13.44 to 18.95 million tons. The majority of Virginia coal is shipped from mine to market by railroad. It is estimated that over 90% of Virginia's coal production is hauled to market by Norfolk Southern. A significant portion of the utility coal produced in southeast Virginia is shipped to generating stations in Tennessee, the Carolinas and/or Georgia.



Virginia Coal Transportation



Two projects are proposed for the Coal Corridor.

Coal Corridor Projects	Start Year	Benefits	Cost (millions)
Andover Rail Sidings	2010	Capacity, flexibility, grade crossings	\$2.9
Clarkton Siding Extension	2011	Capacity, flexibility	\$5.3

~~A. Andover Rail Sidings~~

~~Andover, VA sits on the southern edge of the Virginia coalfields with a small yard serving the area's customers. Several years ago NS purchased the Powell River Railroad, the former-L&N main line between Big Stone Gap and Norton, VA. NS lines converge at Andover from three different directions, and trains have no place to meet. Due to the lack of space to meet, trains are held at the mines, at Norton, or on the small sidings between Andover and Gate City, causing vehicular delay as these sidings cross streets at grade.~~

This project involves the creation of a siding (or "pocket track") within the Andover yard limits by rearranging, rehabilitating and connecting several auxiliary tracks.

Begin westbound on Appalachia District at milepost 2.3-T:

(A) Replace #10 hand-throw turnout (from main track to Load Track #1) with hand-throw #15 turnout.

- ~~(B) Upgrade Load Track #1 between milepost 2.3-T and 1.4-T~~
- ~~(C) Construct track and tie-in between milepost 1.4-T and 1.2-T (1.2-T=LN-279.1)~~
- ~~(D) Upgrade former L&N main line between milepost LN-279.1 (1.4-T=LN-279.1) and milepost LN-279.7 (0.6-T=LN-279.7)~~
- ~~(E) Install two #15 hand-throw crossovers at milepost LN-279.7/0.6-T (Pine Street, which has crossing signals)~~

Begin eastbound on Clinch Valley Extension at milepost LN-5.5

- ~~(F) Upgrade former L&N mainline between milepost LN-279.7 and milepost LN-280.1~~
- ~~(G) Convert #10 hand-throw turnout at milepost LN-280.1/LN-5.5 to #15 hand-throw crossover~~
- ~~(H) Install #15 hand-throw crossover at milepost LN-280.1/LN-5.5 (immediately west of G)~~

B. Project Clarkton Siding

The L-line begins in Lynchburg, crosses the Coal Corridor at L- 33.5 at Vabrook and continues south to connect with the Clover branch servicing the Clover power stations and into North Carolina to the Hyco and Mayo power plants. In addition to coal trains, there are several merchandise customers served on these lines. Clarkton siding is located at milepost L-37. Unit coal trains average 180 cars per train. The L-line is single track with a short siding at Clarkton (L-37), Sinai (L-58), and Denniston (L-68). NS proposes to extend the Clarkton siding to 11,000 feet in order to provide room for unit coal trains (both empty and loaded) and merchandise trains to meet and pass safely.

2) Project Objectives:

A - Andover Rail Siding

~~The objective of the project is to improve safety and improve operating efficiency. Improving the operating efficiency of the area will increase the freight capacity which will result in a reduction in the time that cars and trucks are waiting at grade crossings.~~

These lines serve Virginia coalmines and handle approximately 85% utility coal and 15% export coal. Virginia's coalmines, which are located entirely within the southwestern counties of the Commonwealth, are in direct competition with those in West Virginia, Kentucky and Tennessee. Many of the competing mines benefit from being located on mainline routes of Norfolk Southern Railway Company and/or CSX Transportation, Inc. As coal receivers, especially electric utilities, increase their ownership of coal hauling train-sets, round-trip cycle times, including line-of-road transit, are becoming a significant factor in the customers' coal sourcing decisions.

With the new siding, trains will be able to meet and pass as they move through Andover/Appalachia (without blocking road crossings while standing) rather than being held at the mines, on current sidings, or in Norton. Eliminating the need to

~~hold trains will improve coal train efficiency that will improve throughput at the coalmines and will allow Norfolk Southern to handle these shipments as expeditiously as those originating in neighboring states. Based on September 2008 data, NS operated an average 16.8 trains per day into and out of Andover Yard. This project will allow each train to avoid about an hour's delay.~~

B – Clarkton Rail Siding

The objective of this project is to provide room for unit coal trains (both empty and loaded) and merchandise trains to meet and pass safely and thereby increase capacity and improve service for customers.

3) Relationship to Other Projects under Development by Applicant or Previously Funded by this Program:

Several projects identified for the Route 460/Heartland Corridor also benefit the Coal Corridor as the coal and Heartland intermodal corridors overlap through much of Virginia.

No provision has been made for crossing closure or grade separation(s) associated with the Andover project. However, there is a possible opportunity for closing one or both of the crossings in the project area as alternate access is available. Both Kilbourne Avenue and Pine Street are connected and Inman Pike provides access to the area.

4) Describe the Public Benefits of Project. Identify significant types of benefits and beneficiaries from this project. (See Attachment A).

A. Andover Rail Sidings Benefits:

~~This project will help to keep Virginia coalmines competitive with mines in West Virginia, Kentucky and Tennessee. The Andover project will enhance the safety of the area and reduce emissions.~~

By improving train movements through Andover/Appalachia, several benefits are achieved:

- Improved grade crossing safety/Reduced vehicular delay at grade crossings (especially in other Southwest Virginia cities and towns, estimated 2+ hours per day)
- Reduced emissions of idling vehicles and trucks at grade crossings.
- Improved operating efficiency and the potential for increased throughput at Virginia coalmines.
- Improved freight transit time with improved operating efficiency
- Reduced fuel consumption (16.8 trains per day)
- Reduced emissions as trains may meet and pass rather than be held or idle while waiting to progress (16.8 trains per day).
- ~~The two coal load-outs in Virginia that presently have the capacity and coal specifications required for Dominion Power's planned generating station near Caledonia, Virginia, are both located in Wise County west of Andover/Appalachia.~~

~~Rail shipments to this location from these two load-outs will also benefit from this proposed siding.~~

B. Clarkton Siding

By reducing aggregate delay, this project will help to improve air quality and conserve fuel. By increasing capacity, the project enables the rail mode to absorb more growth.

Attachment A – Project Data Information Form – Must be completed by Applicant and submitted with this application.

H. Type of Project:

- ~~A. Andover~~, B. Clarkton,
1) ~~A.~~ B. New Construction ~~A.~~ Rehabilitation ___ Study
2) ~~A.~~ B. Rail Infrastructure ___ Rail Facility/Station
___ Equipment/Rolling Stock ___ Signals/Communication Equipment
3) Other _____

I. Application Scope of Work Covers:

X Entire Project ___ A Phase of a Multi-Phase Project ___ Completion Phase

J. Project Budget Summary:

Coal Corridor Projects:	Andover Siding	Clarkton Siding
Preliminary Services, Engineering, or Feasibility Study	87,400	157,700
Environmental Evaluation	0	0
Design Engineering	0	35,000
Right of Way Acquisition	0	47,000
Construction	2,635,200	4,671,700
Construction Management	147,800	266,600
Lease/Acquisition of Equipment	0	0
Public Involvement (if applicable)	0	0
Other: (Contingency)	67,600	122,000
Subtotal	2,938,000	5,300,000
Total Project	\$8,238,000	

K. Attach detailed budget and schedule information. If the project is for final design, construction or procurement; then plans, specifications and reports to a preliminary engineering level (approximately 30%) should be provided to support the project cost and major features (if applicable). A sample budget and schedule is included in Appendix D.

L. Rail Enhancement Funds Requested in this Application: ~~\$5,766,600~~ ^{\$3,710,000}
 Maximum 70% of Total Project Budget. 70%
 Do not include any previous allocations or future phases.

M. Local Match Required by Applicant: ~~\$2,471,400~~ ^{\$1,590,000}
 At least a minimum 30% of Total Project Budget. 30%

If Overmatch, Provide Percentage _____

1) Match breakdown by Source (Including any in-kind match)

- a. Provider of Local Match Norfolk Southern
- b. Status (confirmed/anticipated) confirmed
- c. Attach justification for value of in-kind match.
 NS will provide prior to completion of Rail Enhancement Grant Agreement

2) Other Funding Sources Beyond Match Requirement

- a. Provider of Overmatch _____
- b. Status (confirmed/anticipated) _____

Funding Allocation by Project	Andover Sidings	Clarkton Siding
Rail Enhancement Funding	\$2,056,600	\$3,710,000
Rail Enhancement Funding %	70%	70%
NS match	\$881,400	\$1,590,000
NS Match %	30%	30%
NS Overmatch %	0%	0%
Total	2,938,000	\$5,300,000

N. Project implementation schedule (based in months). List major milestones of the project, including environmental review and public involvement points if applicable.

~~A. Andover Rail Sidings:~~

Milestone Description	Estimated Completion Date From Notice to Proceed
o Notice to Proceed	Start Point
o Survey and Finalize Plans	3 Months
o Track work	7 Months
o Upgrade Existing Bridge	8 Months

B. Clarkton Siding:

<u>Milestone Description</u>	<u>Estimated Completion Date From Notice to Proceed</u>
○ Notice to Proceed	Start Point
○ Survey and Develop Plans	3 Months
○ Acquire Right of Way (if required)	6 Months
○ Bidding	8 Months
○ Permitting	10 Months
○ Grading	15 Months
○ Track work	18 Months

O. Statement of how this project promotes or does not preclude dual/multi-access use.

~~A. Andover Siding~~

~~This project is on Norfolk Southern owned right-of-way, the rail line will remain an exclusive Norfolk Southern route.~~

B. Clarkton Siding

This project is on Norfolk Southern owned right-of-way; the rail line will remain an exclusive Norfolk Southern route.

P. List additional users of rail line, facility, and/or equipment:

~~A. Andover Rail Siding~~

~~None.~~

B. Clarkton Siding

None.

Q. Identify any possible environmental or other issues/concerns within the scope of this project.

~~A. Andover Rail Sidings~~

~~No environmental issues are expected, as all of the construction will occur within NS owned right-of-way. Environmental benefits of the project will include improved air quality through reduced emissions as trains will not need to be held or idle at the coal mines, at Norton, or on the siding between Andover and Gate City, and as vehicular traffic will not be idled as long or as often when grade crossings are blocked.~~

B. Clarkton Siding

No environmental issues are expected for the Clarkton Siding as all work is expected to be performed on the NS right-of-way. It is expected to have a positive environmental impact by reducing the time that trains idle, and thereby reducing emissions, while waiting to accomplish a meet and pass when the sidings are farther spread out.

Required Attachments:

Application is not complete without items 1-5 completed by the Applicant and submitted with the Application.

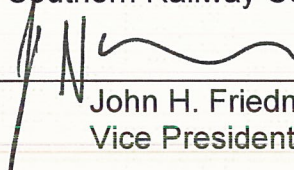
1. Attachment A – Project Data Information Form (provided)
2. Attachment B – Application Checklist (Provided)
3. Detailed cost, budget and schedule. Include preliminary engineering to 30% report, if applicable (Sample in Appendix D).
4. Certification of Match/% of Match/Documentation of Source of Match including Defined Match Source (To be provided by Applicant).
5. Certification of Additive Investment (To be provided by Applicant).
6. Statement from the Applicant/Owner of the facility that the SWAM participation goals will be achieved by the project.
7. Statement by the owner of the facility that acknowledges the Commonwealth will have a public interest in the facilities, materials, equipment and improvements funded or impacted by this project (To be provided by Applicant/Owner).

Application and Attachment Certification

To the best of my knowledge all information contained in this application and its attachments is true. The information provided to the Virginia Department of Rail and Public Transportation (DRPT) is subject to full disclosure except where protected by Virginia Code. Any additional documentation related to this application will be provided to DRPT upon request.

Authorized Signature and Title:

Norfolk Southern Railway Company


Name: _____ Date: 1/30/09
Title: John H. Friedmann
Vice President

One signed original, twelve copies, and an electronic copy in pdf format of the completed application and required documentation must be mailed under applicant cover to:

Director
Virginia Department of Rail and Public Transportation
1313 East Main Street, Suite 300
Richmond, Virginia 23219



Rail Enhancement Fund
Project Application Form

Internal Use
DRPT Tracking #

EXHIBIT II

Attachment A
Project Data Information Form

Date: January 30, 2009

Name of Applicant and Project:
Norfolk Southern – Clarkton Siding

General Instructions: Please complete the following forms that apply to the project application.

- For Freight Service projects, complete forms A1, A2 and A5
- For Intercity/Amtrak passenger projects, complete forms A1, A3 and A5
- For Commuter/VRE passenger projects, complete forms A1, A4 and A5
- For projects that involve benefits to both freight and passenger projects, form A1 and forms A2-A4 that apply must be completed. For each completed form A2-A4, a form A5 must be completed for each category for projects resulting in multiple project benefits.

Terms:

Project Cost and Construction period: Form A1 shall be completed with total project cost by year of expenditure with total DRPT cost identified by year of expenditure. This section must be completed for all project applications.

Demand Characteristics: This category of information relates to the additional demand for rail service (including freight and passenger) due to the project. This additional demand must be over and above baseline conditions that currently exist. The specific data to enter here defines initial demand, steady state demand, and the years until steady state demand is achieved.

Steady State Demand: This term refers to the point at which the project benefits/demand have reached a long-term, sustainable level.

Project Impact on Travel Distance: This category of information includes the distance that would be traveled by vehicle or train. All distances should be limited to miles within Virginia. The distance should relate directly to the project-impacted area.

Demand Characteristics for a 15-year Performance Period: This term refers to the project output by performance year, which will be utilized to determine that public benefits and to determine the performance requirements over the 15-year Performance Period of the Grant Agreement.

EXHIBIT II
Attachment A
Form A1 – Project Cost and Construction Period
Norfolk Southern – Clarkton Siding

First Construction Year: 2011

Last Construction Year: 2012

Year	Total Project COST	Total DRPT COST
2011	\$2,150,000	\$1,505,000
2012	\$3,150,000	\$2,205,000
Total	\$5,300,000	\$3,710,000

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.

EXHIBIT II
Attachment A
Form A2 – Freight Service
Norfolk Southern – Clarkton Siding

Demand Characteristics	CATEGORY	UNITS	VALUE
	Steady state demand – diversion of freight to rail (from trucks)	Carloads/Year	n/a
	First year of diversion	Carloads/Year	n/a
	Number of years until steady state	Number of Years	n/a

Project impact on Travel Distance	CATEGORY	UNITS	VALUE
	Rail miles in Virginia (Existing routing before project)	Miles	n/a
	Rail miles in Virginia (routing after project completion)	Miles	n/a
	Number of years until steady state	Number of Years	n/a

Conversions	CATEGORY	UNITS	VALUE
	Railcars per Train	Railcars/Trains	n/a
	Rail tons per Railcar	Tons/Railcar	n/a
	Trucks per Railcar	Trucks/Railcar	n/a

Other	CATEGORY	UNITS	VALUE
	Change in Daily Delay for Freight Trains	Railcars/Trains	To be determined
	Reduction in Number of Rail At-Grade Crossings	Tons/Railcar	n/a

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.

EXHIBIT II
Attachment A
Form A5– Demand Characteristics for 15-Year Performance Period
Norfolk Southern – Clarkton Siding

Performance Year	Performance Value *
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
Total	

For Freight Service Projects – car loads or containers per year
For Inter-City/Amtrak Passenger Projects – passengers per year
For Commuter/VRE Passenger Projects – passengers per year

**Performance Values to be determined as costs and benefits projections
refined as project and funding progresses.**



Rail Enhancement Fund
Project Application Checklist

Internal Use

DRPT Tracking #

EXHIBIT II

Attachment B

Date: January 30, 2009

Name of Applicant and Project:
Norfolk Southern – Clarkton Siding

Checklist for Application:

1. Project is consistent with goals of applicable adopted state, regional and/or local plans.

☒ YES ☐ NO

2. Project is an Additive Investment to Virginia.

☒ YES ☐ NO

3. Project provides for, or does not preclude, shared or dual access opportunity.

☒ YES ☐ NO

4. Applicant has provided documentation and certification of at least a minimum 30% match.

☒ YES ☐ NO

5. Applicant has provided an environmental review plan and/or public involvement plan, if applicable, and required budget for this activity as outlined in Appendix D.

☒ YES ☐ NO

6. Application is complete, including signature and specified number of hard copies and an electronic (pdf file) copy; and Applicant has reviewed the Standard Agreement as provided in Appendix C.

☒ YES ☐ NO

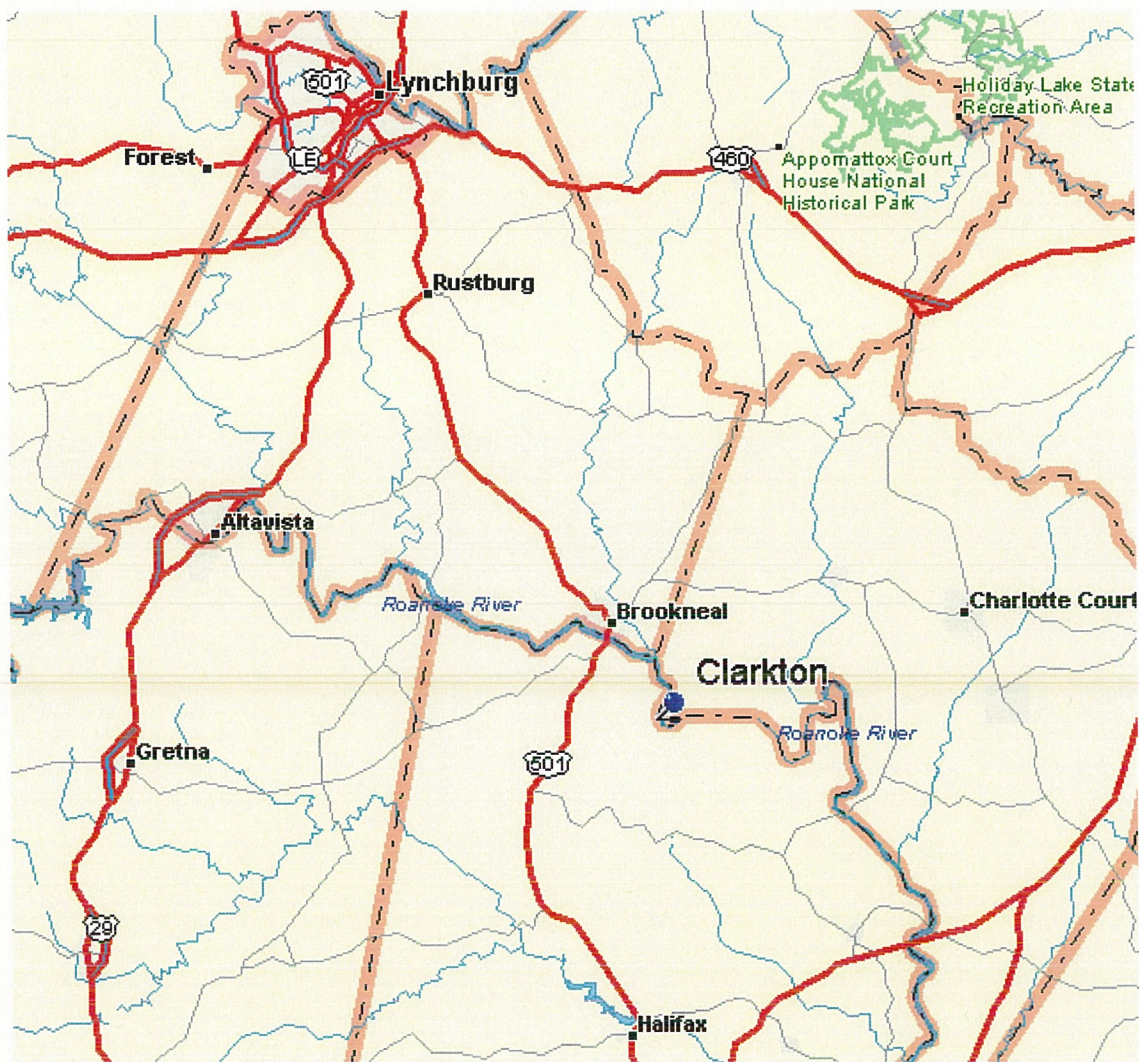
Rail Enhancement Fund
Project Application Form

EXHIBIT II

Attachment C

Date: January 30, 2009

Name of Applicant and Project:
Norfolk Southern – Clarkton Siding



Rail Enhancement Fund
Project Application Form

EXHIBIT II

Attachment C

Date: January 30, 2009

Name of Applicant and Project:
Norfolk Southern – Clarkton Siding

